



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 135947

TO: Ruixiang Li
Location: rem/4d75/4c70
Art Unit: 1646
Tuesday, November 02, 2004

Case Serial Number: 10/763854

From: Edward Hart
Location: Biotech-Chem Library
REM-1A55
Phone: 571-272-2512

edward.hart@uspto.gov

Search Notes

Examiner Li,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart

Db 1 MNEPLDYLANASDFPDYAAAFGNCCTDENIPKXHYLPVIYGIIFLVGPGNAVISTYIF 60
QY 61 KMRPKSSTIIMNLACTDLYLTSPLIHYVYASGENWIFGDFMCKEIRSFHFNLVSS 120
Db 62 KMRPKSSTIIMNLACTDLYLTSPLIHYVYASGENWIFGDFMCKEIRSFHFNLVSS 120
QY 121 ILMTCTSFYRYCVIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTITSTNRTNR 180
Db 121 ILMTCTSFYRYCVIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTITSTNRTNR 180
QY 181 SACLDTSSDELNTIKWYLLTATTCFLPLVIVTLCYTTIIHTLTHGLQDSCCLKQKAR 240
Db 181 SACLDTSSDELNTIKWYLLTATTCFLPLVIVTLCYTTIIHTLTHGLQDSCCLKQKAR 240
QY 241 RLTIILLAFYVCFPHILRVIRIESRLLSISCSIEHQIHEAVIVSRPLAALNTFGNLL 300
Db 241 RLTIILLAFYVCFPHILRVIRIESRLLSISCSIEHQIHEAVIVSRPLAALNTFGNLL 300
QY 301 LYVVSDFNQAVCVSTVRCKVSGNLEQAKKISYNNP 337
Db 301 LYVVSDFNQAVCVSTVRCKVSGNLEQAKKISYNNP 337

RESULT 6
AAO14027
ID AAO14027 standard; protein; 337 AA.
XX
AC AAO14027;
XX
DT 30-APR-2002 (first entry)
XX
DE Human purinergic-related G-protein coupled receptor (GPCR).
XX
KW Human; chromosome 13; purinergic GPCR; G-protein coupled receptor;
KW signal transduction; human protease; GPCR disorder; gene therapy;
KW transgenic animal; receptor.
XX
OS Homo sapiens.
XX
FN WO2000187980-A2.
XX
PD 22-NOV-2001.
XX
PF 17-MAY-2001; 2001WO-US015957.
XX
PR 18-MAY-2000; 2000US-0205196P.
FR 08-AUG-2000; 2000US-00634656.
XX
FA (APPL-) APPLERA CORP.
XX
PI Wei M, Zhao Q, Cravchik A, Di Francesco V, Beasley EM;
XX
DR WPI, 2002-075312/10.
XX
DR N-PSDB; AAK98323, AAK98324.

Novel isolated G-protein coupled receptor peptide useful for treating disorder characterized by absence of, in appropriate or unwanted expression of the receptor protein, and as immunogens to raise antibodies.
XX
PS Claim 1; Fig 2; 64pp; English.
XX
CC The present specifically claimed sequence represents a human purinergic-related G-protein coupled receptor (GPCR) encoded by a gene on chromosome 13. GPCRs constitute a major class of proteins responsible for signal transduction within a cell. Upon binding of a ligand to the extracellular portion of a GPCR, a signal is transduced resulting in a biological or physiological change within the cell. The GPCR proteins can be divided into five families, family I contains the purinergic GPCRs (e.g. the P2Y receptors). P2Y receptors are characterized by their selective responsiveness towards ATP and its analogues, some also respond to UTP. The invention comprises a human G-protein coupled receptor protein and

CC encoding nucleic acids. The GPCR protein and nucleic acids of the CC invention are useful in the treatment of a disease or condition mediated by a human protease. The GPCR protein of the invention is useful for: the CC development/identification of therapeutic proteins; assays designed to CC quantitatively determine levels of the protein in biological fluids; CC identifying compounds which modulate the activity of the GPCR, or the CC interaction of the GPCR and a molecule with which it normally interacts; CC and treating a disorder characterised by an absence of, or inappropriate CC expression of the GPCR protein. The GPCR nucleic acids of the invention CC are useful in diagnostic assays to identify changes in the GPCR nucleic CC acid that lead to pathology; controlling GPCR expression; and in gene CC therapy to treat patients with aberrant GPCR gene expression. The GPCR CC nucleic acids can also be used in the production of transgenic animals
XX
SQ Sequence 337 AA;

Query Match 100.0%; Score 1771; DB 5; Length 337;
Best Local Similarity 100.0%; Pred. No. 1.1e-194;
Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MNEPLDYLANASDFPDYAAAFGNCCTDENIPKXHYLPVIYGIIFLVGPGNAVISTYIF 60
Db 1 MNEPLDYLANASDFPDYAAAFGNCCTDENIPKXHYLPVIYGIIFLVGPGNAVISTYIF 60
QY 61 KMRPKSSTIIMNLACTDLYLTSPLIHYVYASGENWIFGDFMCKEIRSFHFNLVSS 120
Db 61 KMRPKSSTIIMNLACTDLYLTSPLIHYVYASGENWIFGDFMCKEIRSFHFNLVSS 120
QY 121 ILMTCTSFYRYCVIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTITSTNRTNR 180
Db 121 ILMTCTSFYRYCVIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTITSTNRTNR 180
QY 181 SACLDTSSDELNTIKWYLLTATTCFLPLVIVTLCYTTIIHTLTHGLQDSCCLKQKAR 240
Db 181 SACLDTSSDELNTIKWYLLTATTCFLPLVIVTLCYTTIIHTLTHGLQDSCCLKQKAR 240
QY 241 RLTIILLAFYVCFPHILRVIRIESRLLSISCSIEHQIHEAVIVSRPLAALNTFGNLL 300
Db 241 RLTIILLAFYVCFPHILRVIRIESRLLSISCSIEHQIHEAVIVSRPLAALNTFGNLL 300
QY 301 LYVVSDFNQAVCVSTVRCKVSGNLEQAKKISYNNP 337
Db 301 LYVVSDFNQAVCVSTVRCKVSGNLEQAKKISYNNP 337

RESULT 7
AAU77600
ID AAU77600 standard; protein; 337 AA.
XX
AC AAU77600;
XX
DT 05-JUN-2002 (first entry)
XX
DE Human P2Y1-like G protein-coupled receptor.
XX
KW Human; P2Y1-like G protein-coupled; receptor; GPCR; infection; pain;
KW cancer; anorexia; bulimia; asthma; hypotension;
KW central nervous system disease; acute heart failure; hypertension;
KW urinary retention; osteoporosis; diabetes; angina pectoris;
KW myocardial infarction; ulcer; inflammation; allergy; multiple sclerosis;
KW benign prostatic hypertrophy; psychosis; neurological disorder;
KW dyskinesia; HIV; human immunodeficiency virus infection; CNS disorder;
KW Parkinson's disease; anxiety; schizophrenia; manic depression; delirium;
KW dementia; severe mental retardation; Huntington's disease;
KW Tourette's syndrome.
XX
OS Homo sapiens.
XX
FN WO200214511-A2.
XX
PD 21-FEB-2002.
XX
PF 10-AUG-2001; 2001WO-EP009243.

XX PR 14-AUG-2000; 2000US-0224989P.
XX PA (FARB) BAYER AG.
XX PI Ramakrishnan S;
XX PI WPI; 2002-257607/30.
DR N-PSDB; ABK11381.

XX Novel human P2Y1-like G protein-coupled receptor polypeptide which can be regulated for treating infection, pain, cancer, diabetes, anorexia, asthma, hypertension, neurological disorder and dyskinesia.

XX Claim 25; Fig 2; 118pp; English.

XX The invention relates to a purified human P2Y1-like G protein-coupled receptor (GPCR) polypeptide and the nucleic acids encoding it (including 5' and 3' sequences, promoters, fragments, variants, or a sequence encoding a protein at least 50% identical to the GPCR). Also included are an expression vector comprising the nucleic acid, a host cell containing the vector and the identification of modulators of the GPCR especially those that reduce the activity of the GPCR. The nucleic acid is useful for detecting a polynucleotide encoding the GPCR in a biological sample. The GPCR and nucleic acid are useful for screening for agents which decrease the activity of the GPCR and for modulators of the GPCR. The modulator or agent useful for modulating the activity of P2Y1-like G protein-coupled receptor in a disease such as bacterial, fungal, protozoan, and viral infection, pain, cancer, anorexia, bulimia, asthma, central nervous system (CNS) disease, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, diabetes, angina pectoris, myocardial infarction, ulcer, inflammation, allergy, multiple sclerosis, benign prostatic hypertrophy, psychotic and neurological disorders, dyskinesias, HIV virus infection (human immunodeficiency virus), CNS disorders such as Parkinson's disease, anxiety, schizophrenia, manic depression, delirium, dementia, severe mental retardation, Huntington's disease and Tourette's syndrome. The present sequence represents the P2Y1-like GPCR of the invention

XX Sequence 337 AA;

Query Match 100.0%; Score 1771; DB 5; Length 337;
Best Local Similarity 100.0%; Pred. No. 1.1e-194;
Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNEPLDYLANASDPDYAAAFNGCTDENIPKQHYLPVYIGIIFLVGFGNAVISTYIF 60
DB 1 MNEPLDYLANASDPDYAAAFNGCTDENIPKQHYLPVYIGIIFLVGFGNAVISTYIF 60
QY 61 KMRPKSSTIIIMNLACTDLILYLSLPLHYHYASGENWIFGDMCKFIRSFHNYSS 120
DB 61 KMRPKSSTIIIMNLACTDLILYLSLPLHYHYASGENWIFGDMCKFIRSFHNYSS 120
QY 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTSTNTR 180
DB 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTSTNTR 180
QY 161 SACLDTSSDELTNKWYNIILTATTCFLPLVIVLCYTTIHTLTHGLQDSCLKQXAR 240
DB 161 SACLDTSSDELTNKWYNIILTATTCFLPLVIVLCYTTIHTLTHGLQDSCLKQXAR 240
QY 241 RLTIILLALLFYVCFPLPHILVRIRIESRLLSISCSIEHQIHEAYIVSRPLAALNTFGNLL 300
DB 241 RLTIILLALLFYVCFPLPHILVRIRIESRLLSISCSIEHQIHEAYIVSRPLAALNTFGNLL 300
QY 301 LYVWSDNFQAVCVTRCKVSGNLEQAKKISYSNNP 337
DB 301 LYVWSDNFQAVCVTRCKVSGNLEQAKKISYSNNP 337

RESULT 8

AAE21803

ID AAE21803 standard; protein; 337 AA.

XX AAE21803;
XX 16-JUL-2002 (first entry)
XX DE Human AXOR89 (G-protein coupled receptor) protein.
XX KW Human; AXOR89 polypeptide; G-protein coupled receptor; vaccine; receptor;
KW infection; cancer; pain; asthma; Parkinson's Disease; diabetes; obesity;
KW anorexia; bulimia; acute heart failure; hypotension; hypertension; ulcer;
KW stroke; urinary retention; osteoporosis; angina pectoris; schizophrenia;
KW myocardial infarction; allergy; benign prostatic hypertrophy; migraine;
KW vomiting; psychotic; neurological disorder; anxiety; manic depression;
KW delirium; Huntington's Disease; Gilles de la Tourette's syndrome;
KW dementia; dyskinesia.

XX Homo sapiens.

XX GB2365012-A.

XX 13-FEB-2002.

XX 10-MAY-2001; 2001GB-00011437.

XX 11-MAY-2000; 2000US-00569137.

XX (SMIK) SMITHKLINE BEECHAM CORP.

XX (SMIK) SMITHKLINE BEECHAM PLC.

XX Elshourbagy N, Shabon U;

XX WPI; 2002-332558/37.

XX N-PSDB; AAD34278.

XX Novel AXOR89 polypeptide and polynucleotide encoding it, useful for identifying agonists and antagonists in the treatment of diseases associated with an AXOR89 imbalance, such as cancers, diabetes or asthma.

XX Claim 1; Page 30; 37pp; English.

XX The invention relates to an isolated AXOR89 polypeptide (G-protein coupled receptor) and its polynucleotide. The novel AXOR89 polypeptide and polynucleotide encoding the polypeptide, is useful for identifying agonists and antagonists (or inhibitors) that are potentially useful in treating conditions associated with an AXOR89 imbalance, such as bacterial, fungal or protozoan infections, cancers, pain, asthma, Parkinson's Disease, diabetes, obesity, anorexia, bulimia, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, stroke, ulcers, allergies, benign prostatic hypertrophy, migraine, vomiting, psychotic and neurological disorders, anxiety, schizophrenia, manic depression, delirium, dementia, dyskinesias, such as Huntington's Disease or Gilles de la Tourette's syndrome. The polynucleotide sequence may also be used for chromosome localisation or tissue expression studies. The AXOR89 is used as a vaccine or to produce fusion proteins. The present sequence is human AXOR89 protein

XX Sequence 337 AA;

Query Match 100.0%; Score 1771; DB 5; Length 337;

Best Local Similarity 100.0%; Pred. No. 1.1e-194;

Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNEPLDYLANASDPDYAAAFNGCTDENIPKQHYLPVYIGIIFLVGFGNAVISTYIF 60
DB 1 MNEPLDYLANASDPDYAAAFNGCTDENIPKQHYLPVYIGIIFLVGFGNAVISTYIF 60
QY 61 KMRPKSSTIIIMNLACTDLILYLSLPLHYHYASGENWIFGDMCKFIRSFHNYSS 120
DB 61 KMRPKSSTIIIMNLACTDLILYLSLPLHYHYASGENWIFGDMCKFIRSFHNYSS 120
QY 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVACAVVWIIISLVAVIPMTFLTSTNTR 180

XX
PT An isolated p2Y-like receptor polypeptide (HIPHUM 0000037) which can be
PT used for the identification of agonists and antagonists which may be used
PT to treat an immune or inflammatory disease.

PS Claim 5; Page 28-29; 35pp; English.

The invention relates to an isolated p2Y₁-like receptor polypeptide (AB3848-AB3849), which is also referred to in the specification as HRP100_000037. An effective amount of a substance (agonist or antagonist) which modulates p2Y₁ receptor activity is useful to treat a subject having a disorder that is responsive to p2Y₁-like receptor modulation. The disorder is a disease of immunity or inflammation. The substance may also be used to manufacture a medicine for the treatment or prophylaxis of a disorder that is responsive to stimulation or modulation of p2Y₁-like receptor activity. Disorders which may be treated include colon cancer, asthma, COPD, Crohn's disease, irritable bowel syndrome, gastroenteritis and colitis, inflammatory bowel syndrome, ulcerative colitis, rheumatoid arthritis, viral diseases, bacterial infections, autoimmune diseases, dermatitis, glomerulonephritis allergies, allergic rhinitis, inflammatory pain and general inflammation such as tendonitis, polymyositis or psoriasis. The invention provides alternative substances for the treatment of immunological and inflammatory diseases. The present sequence is that the p2Y₁-like receptor variant encoding gene of the invention

SQ Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;

Query Match 99.8%; Score 1012.4; DB 6; Length 1014;
Best Local Similarity 99.9%; Pred. No. 5.8e-289;
Matches 1013; Conservative 0; Mismatches 1; Indels 0; Gaps 0

QY	1	ATGAATGAGCCACTAGACTTTTTCGAAATGCTTCTGATTTCCCGGATTAAGCAGTGTCT	60
Db	1	ATGAATGAGCCACTAGACTATTATGCAAAATGCTTCTGATTTCCCGGATTAAGCAGTGTCT	60
QY	61	TTTGGAAATTGCACCTGATGAAATATCCACTCAAGATGCACCTACCTCCCTGTTATTAT	120
Db	61	TTTGGAAATTGCACCTGATGAAACATCCACTCAAGATGCACCTCCCTGTTATTAT	120
QY	121	GGCATTATCTTCTCGTGGATTTCCAGCGCAATGCAGTAGTGATATCCATTACATTTTC	180
Db	121	GGCATTATCTTCTCGTGGATTTCCAGCGCAATGCAGTAGTGATATCCATTACATTTTC	180
QY	181	AAATGAGACCTTGGNAGGAGCAGCACATCATTAATGCTGAACCTGGCGCTGCACAGATCTG	240
Db	181	AAATGAGACCTTGGNAGGAGCAGCACCATCATTAATGCTGAACCTGGCGCTGCACAGATCTG	240
QY	241	CTGTATCTGACGAGCCTCCCTTCCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC	300
Db	241	CTGTATCTGACGAGCCTCCCTTCCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC	300
QY	301	TTTGGAGATTTCATGTGAAGTTTATCCGCTTCAGCTTACCATTTCAACCTGTATAGCAGC	360
Db	301	TTTGGAGATTTCATGTGAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC	360
QY	361	ATCCTCTCTCCTACCTGTTTCAGCATCTTCGCTACTGTTGTATCATTTCCACCCCAATGAGC	420
Db	361	ATCCTCTTCTCCTACCTGTTTCAGCATCTTCGCTACTGTTGTATCATTTCCACCCCAATGAGC	420
QY	421	TGCTTTTCCATTCACAAAACCTCGATGTGCAGTTGTAGCCTGTGCTGTGGTGTGGATCAT	480
Db	421	TGCTTTTCCATTCACAAAACCTCGATGTGCAGTTGTAGCCTGTGCTGTGGTGTGGATCAT	480
QY	481	TCACTGGTAGCTGTCAATTCGGATGACCTTCTTGATATCATCAACCAACAGACCAACAGA	540
Db	481	TCACTGGTAGCTGTCAATTCGGATGACCTTCTTGATATCATCAACCAACAGACCAACAGA	540
QY	541	TCAGCCTGTCTGCAGCTCACAGTTCGAGTCTCAATCTCAATCTATTAAGTGGTACACCTA	600
Db	541	TCAGCCTGTCTGCAGCTCACAGTTCGAGTCTCAATCTCAATCTATTAAGTGGTACACCTA	600
QY	601	ATTTTGACTGCACTACTTTCCTGCTCCCTTGGTGTAGTAGACACTTTGCTATACAG	660

CC chromosome 13) encodes a purinergic-related G-protein coupled receptor
 CC (GPCR) of the invention. GPCRs constitute a major class of proteins
 CC responsible for signal transduction within a cell. Upon binding of a
 CC ligand to the extracellular portion of a GPCR, a signal is transduced
 CC resulting in a biological or physiological change within the cell. The
 CC GPCR proteins can be divided into five families, family I contains the
 CC purinergic GPCRs (e.g. the P2Y receptors). P2Y receptors are
 CC characterised by their selective responsiveness towards ATP and its
 CC analogues, some also respond to UTP. The invention comprises a human G-
 CC protein coupled receptor protein and encoding nucleic acids. The GPCR
 CC protein and nucleic acids of the invention are useful in the treatment of
 CC a disease or condition mediated by a human protease. The GPCR protein of
 CC the invention is useful for: the development/identification of
 CC therapeutic proteins; assays designed to quantitatively determine levels
 CC of the protein in biological fluids; identifying compounds which modulate
 CC the activity of the GPCR, or the interaction of the GPCR and a molecule
 CC with which it normally interacts; and treating a disorder characterised
 CC by an absence of, or inappropriate expression of the GPCR protein. The
 CC GPCR nucleic acids of the invention are useful in diagnostic assays to
 CC identify changes in the GPCR nucleic acid that lead to pathology;
 CC controlling GPCR expression; and in gene therapy to treat patients with
 CC aberrant GPCR gene expression. The GPCR nucleic acids can also be used in
 CC the production of transgenic animals
 CC
 CC Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;

Query Match 99.84; Score 1012.4; DB 6; Length 1014;
 Best Local Similarity 99.9%; Pred. No. 5.8e-289;
 Matches 1013; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 1 ATGAATGAGCCACTAGACTATTAGCAATGCTTCTGATTTCCCGATTTAGCAGCTGCT 60
 1 ATGAATGAGCCACTAGACTATTAGCAATGCTTCTGATTTCCCGATTTAGCAGCTGCT 60
 61 TTGGAATGCACTGATGAAACATCCACTAAGATGCACTACCTCCCTGTTATTAT 120
 61 TTGGAATGCACTGATGAAACATCCACTAAGATGCACTACCTCCCTGTTATTAT 120
 121 GCAATATCTTCTCGTGGATTTCCAGCAATGCACTAGTATGATATCCACTTCAATTTTC 180
 121 GCAATATCTTCTCGTGGATTTCCAGCAATGCACTAGTATGATATCCACTTCAATTTTC 180
 181 AAATGAGACCTTGAAGAGAGACCAATCATTTATGCTGAACCTGGCTGCACAGATCTG 240
 181 AAATGAGACCTTGAAGAGAGACCAATCATTTATGCTGAACCTGGCTGCACAGATCTG 240
 241 CTGATCTGACCGACCTCCCTTCTGATTTCACTACTATGCCAGTGGCGAAACTGGATC 300
 241 CTGATCTGACCGACCTCCCTTCTGATTTCACTACTATGCCAGTGGCGAAACTGGATC 300
 301 TTGAGAGATTTTCAATGTGAAGTTTATCCGCTTTCAGCTTCCCAATTTCACTGTATAGCAGC 360
 301 TTGAGAGATTTTCAATGTGAAGTTTATCCGCTTTCAGCTTCCCAATTTCACTGTATAGCAGC 360
 361 ATCCTCTTCTCCTCAGCTTTTCAAGATCTTCGCTACTGTGATCATTTCACTCCCAATGAGC 420
 361 ATCCTCTTCTCCTCAGCTTTTCAAGATCTTCGCTACTGTGATCATTTCACTCCCAATGAGC 420
 421 TGCTTTTCCATTCACAAACTCGATGTGAGCTGTGATGCTGTGCTGTGATCATTT 480
 421 TGCTTTTCCATTCACAAACTCGATGTGAGCTGTGATGCTGTGCTGTGATCATTT 480
 481 TCATCTGGTGTGCTCATTCGATGACCTTTCTGATGATCAATCAACCAAGAGCAACAGA 540
 481 TCATCTGGTGTGCTCATTCGATGACCTTTCTGATGATCAATCAACCAAGAGCAACAGA 540
 541 TCAGAGCTGTCTGAGCTCAGCTACCACTGCGATGATCAATCAATCAATTAAGTGTACACCTA 600
 541 TCAGAGCTGTCTGAGCTCAGCTACCACTGCGATGATCAATCAATCAATTAAGTGTACACCTG 600
 601 ATTTTGAATGCACTACTTTCTGCTCCCTTGGTGTGATGATGACACTTTGCTATACCAAG 660
 601 ATTTTGAATGCACTACTTTCTGCTCCCTTGGTGTGATGATGACACTTTGCTATACCAAG 660

QY 661 ATTATCCACACTCTGACCCCATGCACTGCAAACTGACAGCTGCTTAAAGCAGAAAGCAGCA 720
 DB 661 ATTATCCACACTCTGACCCCATGCACTGCAAACTGACAGCTGCTTAAAGCAGAAAGCAGCA 720
 QY 721 AGGCTAACCACTCTGCTACTCTGCTTCCATTTTACGATGTTTTCACCTTCCATATCTTG 780
 DB 721 AGGCTAACCACTCTGCTACTCTGCTTCCATTTTACGATGTTTTCACCTTCCATATCTTG 780
 QY 781 AGGCTCATTTCCGATCGAATCTGCTGCTTTCAATCAGTTGTTCCATTGAGAAATCAGATC 840
 DB 781 AGGCTCATTTCCGATCGAATCTGCTGCTTTCAATCAGTTGTTCCATTGAGAAATCAGATC 840
 QY 841 CATGAAGCTTACATCGTTTCTAGACCATGCTGCTGCAACACCTTTGGTAACTGTTA 900
 DB 841 CATGAAGCTTACATCGTTTCTAGACCATGCTGCTGCAACACCTTTGGTAACTGTTA 900
 QY 901 CTATATGCTGCTGCTGAGCGACAACCTTTACGAGGCTGCTGCTCAACAGTGAGATGCAAA 960
 DB 901 CTATATGCTGCTGCTGAGCGACAACCTTTACGAGGCTGCTGCTCAACAGTGAGATGCAAA 960
 QY 961 GTAAGCGGGAACCTTGAGCAAGCAAGAAATAGTTACTCAAAACACCTTTGA 1014
 DB 961 GTAAGCGGGAACCTTGAGCAAGCAAGAAATAGTTACTCAAAACACCTTTGA 1014
 RESULT 9
 ABK11381
 ID ABK11381 standard; DNA; 1014 BP.
 XX AC ABK11381;
 XX DT 05-JUN-2002 (first entry)
 XX DE Human DNA encoding P2Y1-like G protein-coupled receptor.
 XX KW Human; ds; gene; P2Y1-like G protein-coupled receptor; GPCR; infection;
 KW pain; cancer; anorexia; bulimia; asthma; hypotension;
 KW central nervous system disease; acute heart failure; hypertension;
 KW urinary retention; osteoporosis; diabetes; angina pectoris;
 KW myocardial infarction; ulcer; inflammation; allergy; multiple sclerosis;
 KW benign prostatic hypertrophy; psychosis; neurological disorder;
 KW dyskinesia; HIV; human immunodeficiency virus infection; CNS disorder;
 KW Parkinson's disease; anxiety; schizophrenia; manic depression; delirium;
 KW dementia; severe mental retardation; Huntington's disease;
 KW Tourette's syndrome.
 XX OS Homo sapiens.
 XX FH Key Location/Qualifiers
 CDS 1..1014
 FT /*tag= a
 FT /product= "P2Y1-like GPCR"
 XX W0200214511-A2.
 XX 21-FEB-2002.
 XX 10-AUG-2001; 2001WO-EP009243.
 XX 14-AUG-2000; 2000US-0224989P.
 XX (FARB) BAYER AG.
 XX Ramakrishnan S;
 XX WPI; 2002-257607/30.
 XX P-PSDE; AAU77600.
 XX Novel human P2Y1-like G protein-coupled receptor polypeptide which can be
 PT regulated for treating infection, pain, cancer, diabetes, anorexia,
 PT asthma, hypertension, neurological disorder and dyskinesia.
 XX

Claim 1; Fig 5; 118pp; English.

The invention relates to a purified human P2Y₁-like G protein-coupled receptor (GPCR) polypeptide and the nucleic acids encoding it (including 5' and 3' sequences, promoters, fragments, variants, or a sequence encoding a protein at least 50% identical to the GPCR). Also included are an expression vector comprising the nucleic acid, a host cell containing the vector and the identification of modulators of the GPCR especially those that reduce the activity of the GPCR. The nucleic acid is useful for detecting a polynucleotide encoding the GPCR in a biological sample. The GPCR and nucleic acid are useful for screening for agents which decrease the activity of the GPCR and for modulators of the GPCR. The modulator or agent useful for modulating the activity of P2Y₁-like G protein-coupled receptor in a disease such as bacterial, fungal, protozoan, and viral infection, pain, cancer, anorexia, bulimia, asthma, central nervous system (CNS) disease, acute heart failure, hypertension, hypertension, urinary retention, osteoporosis, diabetes, angina pectoris, myocardial infarction, ulcer, inflammation, allergy, multiple sclerosis, benign prostatic hypertrophy, psychotic and neurological disorders, dyskinesias, HIV virus infection (human immunodeficiency virus), CNS disorders such as Parkinson's disease, anxiety, schizophrenia, manic depression, delirium, dementia, severe mental retardation, Huntington's disease and Tourette's syndrome. The present sequence encodes the P2Y₁-like GPCR of the invention.

AX	Sequence	1014 BP	258 A	263 C	189 G	304 T	0 U	0 Other	
Qy	Query Match	99.8%	Score	1012.4	DB	6	Length	1014	
Qy	Best Local Similarity	99.9%	Pred. No.	5.8e-289					
Qy	Matches 1013	Conservative	0	Mismatches	1	Indels	0	Gaps	0
Qy	1	ATGAATGAGCCACTAGACTATTTAGCAAAATGCTCTGTGATTTCCGAGATTTCCCGATATTCGACTGCT	60						
Db	1	ATGAATGAGCCACTAGACTATTTAGCAAAATGCTCTGTGATTTCCGAGATTTCCCGATATTCGACTGCT	60						
Qy	61	TTTGAAATTTGCATGATGTAAGCAATCCCACTCAAGATGCACTACCTCCCTGTTATTTAT	120						
Db	61	TTTGAAATTTGCATGATGTAAGCAATCCCACTCAAGATGCACTACCTCCCTGTTATTTAT	120						
Qy	121	GGCATTATCTCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTTACATTTTC	180						
Db	121	GGCATTATCTCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTTACATTTTC	180						
Qy	181	AAATGAGACCTTGGAGAGAGAGACACCATATTATGCTGAACCTGGCCCTGCACATCTG	240						
Db	181	AAATGAGACCTTGGAGAGAGAGACACCATATTATGCTGAACCTGGCCCTGCACATCTG	240						
Qy	241	CTGTATCTCAGCAGCCTCCCTTCTGATTCACATCTATGCCAGTGGCGAAACTGGATC	300						
Db	241	CTGTATCTCAGCAGCCTCCCTTCTGATTCACATCTATGCCAGTGGCGAAACTGGATC	300						
Qy	301	TTTGGAGATTTCAATGTATAGTTTATCCGCTTCAGCTTCATTTCAACCTGTATAGCAGC	360						
Db	301	TTTGGAGATTTCAATGTATAGTTTATCCGCTTCAGCTTCATTTCAACCTGTATAGCAGC	360						
Qy	361	ATCCTCTCTCTCACCTGTTTACAGCATCTTCGGCTACTGTGTGATCATTTACCCCAATGAGC	420						
Db	361	ATCCTCTCTCTCACCTGTTTACAGCATCTTCGGCTACTGTGTGATCATTTACCCCAATGAGC	420						
Qy	421	TGCTTTTCCATTCAAAAATCTGATGTGAGCTGTGAGCTGTGCTGTGGTGGATCATTT	480						
Db	421	TGCTTTTCCATTCAAAAATCTGATGTGAGCTGTGAGCTGTGCTGTGGTGGATCATTT	480						
Qy	481	TCAGTGTAGCTGTCAATTCGGATGACCTTCCTTGATACATCAACCAACAGGACCAACAGA	540						
Db	481	TCAGTGTAGCTGTCAATTCGGATGACCTTCCTTGATACATCAACCAACAGGACCAACAGA	540						
Qy	541	TCAGCTGTCTCGACTCAGCTCAGGATGAGCTCAATCTATTAACTGGTCAACCTTA	600						
Db	541	TCAGCTGTCTCGACTCAGCTCAGGATGAGCTCAATCTATTAACTGGTCAACCTTA	600						
Qy	601	ATTTTGACTGCAACTACTTTCTGCTCCCTTGGTGTAGTGACATTTCTCTATACCACG	660						

Qy	121	GGCATTATCTTCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC	180
Db	121	GGCATTATCTTCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC	180
Qy	181	AAATCAGACCTTGCAGAGCAGACCAATCAATATGCTGAACCTGGCCCTGCACAGATCTG	240
Db	181	AAATGAGACCTTGGAGAGCAGACCAATCAATATGCTGAACCTGGCCCTGCACAGATCTG	240
Qy	241	CTGTATCTGACGAGCCTCCCTTCTGTATTCATCTATGCCAGTGGGAAAACCTGGATC	300
Db	241	CTGTATCTGACGAGCCTCCCTTCTGTATTCATCTATGCCAGTGGGAAAACCTGGATC	300
Qy	301	TTTGGAGATTTCAATGTGAAGTTTATCCGGCTTCAGCTTCATTTCAACCTGTATAGCAGC	360
Db	301	TTTGGAGATTTCAATGTGAAGTTTATCCGGCTTCAGCTTCATTTCAACCTGTATAGCAGC	360
Qy	361	ATCCTCTTCTGACCTGTTTCAGCATCTTCGGCTACTGCTGTGATCATTCACCCMATGAGC	420
Db	361	ATCCTCTTCTGACCTGTTTCAGCATCTTCGGCTACTGCTGTGATCATTCACCCMATGAGC	420
Qy	421	TGCTTTTCCATTCACAAAACCTCGATGTGCAGTTGTAGCCGTGCTGTGTGGATCAATT	480
Db	421	TGCTTTTCCATTCACAAAACCTCGATGTGCAGTTGTAGCCGTGCTGTGTGGATCAATT	480
Qy	481	TCACTGTAGCTGTCAATCCGATGACCTTCCTTGATCACATCAACCAACAGGACCAACAGA	540
Db	481	TCACTGGTAGCTGTCAATCCGATGACCTTCCTTGATCACATCAACCAACAGGACCAACAGA	540
Qy	541	TCAGCTGTCTGCACTCACAGTTCTCGATGNACTCAATACTATTAAGTGGTCAACCTTA	600
Db	541	TCAGCTGTCTGCACTCACAGTTCTCGATGNACTCAATACTATTAAGTGGTCAACCTTG	600
Qy	601	ATTTTGACTGCAACTACTTTCTGCGCTTCCCTTGGTGATGATGACATTTGCTCATACACG	660